

AMENDMENTS TO THE CLAIMS

Listing of claims:

1. (Currently Amended) A frigate vessel-type equipment system, comprising:
a vessel hull, matched to the frigate vessel-type equipment system on a size and requirement-specific basis; and
standard equipment segments including a power generator segment, a power distribution segment, a propulsion segment and an automation segment, at least one of the standard segments being formed from standard units and components arranged in accordance with the requirements in the vessel hull of the frigate vessel-type equipment system, and installable in vessel hulls of different vessel-type equipment systems, wherein the standard equipment segments are distributable across various portions of the vessel ~~hull~~ hull, and the propulsion segment includes electric motors designed with windings composed of a high temperature superconductor.
2. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 1, wherein the propulsion segment includes a combination of two POD propulsion segments, in the form of completely electrical lightweight POD propulsion systems having a power of 6 to 8 MW, and two waterjet propulsion segments in the form of twin waterjet propulsion systems and having a power of 12 to 16 MW.
3. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 1, wherein the propulsion segment includes a thruster segment.
4. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 2, wherein electric motors in at least one of POD propulsion segments, waterjet propulsion segments and a thruster segment are designed with windings composed of high-temperature superconductors.

5. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 2, wherein electric motors in at least one of POD propulsion segments, waterjet propulsion segments, and in a thruster segment are in the form of synchronous machines with a field winding composed of high-temperature superconductors, and with the stator windings being in the form of air-gap windings.
6. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 2, wherein waterjet propulsion segments are equipped with a coaxial exhaust-gas nozzle segment.
7. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 2, wherein, in the longitudinal direction, the distance between the center of the POD propulsion segments and the nose of the traction propeller of the POD propulsion segment, and the water outlet opening of the pods of the waterjet propulsion segments, is approximately 25 to 35 m.
8. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 2, wherein the vessel hull is structurally designed in the aft area such that it has the strength to hold the weight of the two POD propulsion segments which each weigh approximately 65 tons, as well as the associated units whose weight is approximately 20 to 30 tons, and to absorb the axial forces which occur as a result of the operation of two POD propulsion segments.
9. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 1, wherein the power generator segment is formed from a combination of four fuel cell segments, in the form of at least one of air-breathing PEM fuel cells each having a power of approximately 4.5 MW net or 6 MW gross, and two generator segments each having a power of approximately 16 MW.

10. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 9, wherein the power generator segment has high-power batteries by which the fuel-cell segments can be started up.
11. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 9, wherein the generators have windings composed of a high-temperature superconductor.
12. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 9, wherein the generators are in the form of synchronous machines with a field winding composed of high-temperature superconductors, with the stator windings being in the form of air-gap windings.
13. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 9, wherein four air-breathing PEM fuel cells are associated, in order to supply them with hydrogen, with two diesel reformers, each having a power of approximately 9 MW.
14. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 1, wherein the power generator segment is distributed over a number of ship protection areas in the frigate vessel type equipment system.
15. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 10, wherein a first electrical system with two air-breathing PEM fuel cells is arranged in a stern-end, first ship protection area .
16. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 9, wherein a second electrical system, which is subdivided into a stern-end electrical system section with two gas turbines and a bow-end electrical system section with generators, is arranged in a midships, second vessel protection area .
17. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 16, wherein the stern-end electrical system section and the bow-end electrical system section

of the second electrical system are arranged in adjacent compartments in the midships, second vessel protection area .

18. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 9, wherein a third electrical system having two air-breathing PEM fuel cells is arranged in a third vessel protection area , which is arranged between a second, midships vessel protection area and a bow-end vessel protection area .
19. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 9, wherein a first diesel reformer center with a diesel reformer is arranged in a midships, second vessel protection area , in a compartment which accommodates a bow-end electrical system section of the second electrical system.
20. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 9, wherein a second diesel reformer center with a diesel reformer is arranged in a third vessel protection area , which is arranged between a midships, second vessel protection area and a bow-end vessel protection area.
21. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 2, wherein the POD propulsion segments are designed for the frigate vessel-type equipment system to travel at a cruise speed of approximately 22 knots, and can be supplied with electrical power in this operating state by means of the fuel cell segments.
22. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 2, wherein waterjet propulsion segments are designed for the frigate vessel-type equipment system to travel at a top speed of approximately 26 knots, and can be supplied with electrical power in this operating state by means of the two generators.
23. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 2, wherein the waterjet propulsion segments can be supplied with electrical power from at

least one fuel cell segment until the power limit of the fuel cell segment or segments is reached in order to start up these waterjet propulsion segments with low emissions.

24. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 2, wherein speeds of more than 30 knots are achieved by operating the POD propulsion segments and the waterjet propulsion segments simultaneously, in which case the distribution of the electrical power which is produced by way of the power generator segment can be achieved with optimized efficiency by means of the power distribution segment and energy management for an automation carrier system vessel.
25. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 2, wherein the power distribution segment has a propulsion network which is fed from fuel cells and by which the POD propulsion segments can be supplied with electrical power, and has a generator-fed propulsion network, by which the waterjet propulsion segments can be supplied with electrical power.
26. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 25, wherein the propulsion network which is fed from fuel cells has a stern-end network section which is essentially associated with a stern-end, first vessel protection area, and has a bow-end network section which is essentially associated with the third vessel protection area and can be connected to the stern-end network section via suitable coupling elements.
27. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 25, wherein the generator-fed propulsion network is essentially associated with a midships, second vessel protection area and can be connected to the propulsion network, which is fed via fuel cells, by way of suitable coupling elements.
28. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 26, wherein an auxiliary propulsion system, which is arranged in the bow-end vessel

protection area, can be supplied with electrical power by way of the bow-end network section of the propulsion network which is fed by way of fuel cells.

29. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 25, wherein on-board network loads can be supplied with electrical power from the entire power generation segment, advantageously by way of the propulsion network which is fed via fuel cells.
30. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 25, further comprising low-voltage electrical systems, arranged in various vessel protection areas, connectable to the respectively associated propulsion network and connectable to one another by suitable coupling elements.
31. (Currently Amended) A frigate vessel-type equipment system, comprising:
a vessel hull, matched to the frigate vessel-type equipment system on a size and requirement-specific basis; and
standard equipment segments including a power generator segment, a power distribution segment, a propulsion segment and an automation segment, at least one of the standard segments being formed from standard units and components arranged in accordance with the requirements in the vessel hull of the frigate vessel-type equipment system, and installable in vessel hulls of different vessel-type equipment systems,
wherein the standard equipment segments are distributable across various portions of the vessel hull~~The frigate vessel-type equipment system as claimed in claim 1,~~ wherein the automation segment includes an automation center which has a large number of terminals and a terminal bus, and has two or more servers which are connected to the terminal bus and to a system bus, and to which control networks which are associated with different vessel protection areas are connected.
32. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 31, including a first control network which is essentially associated with a stern-end, first vessel protection area and with which the two POD propulsion segments, two fuel-cell

segments of the power generator segment which are arranged astern, a diesel reformer of the power generator segment which is arranged astern, and the vessel protection engineering which is provided in the stern-end, first vessel protection area are associated.

33. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 32, including a second control network, which is essentially associated with a midships, second vessel protection area and with which two generators of the power generator segment, the two waterjet propulsion segments and the vessel operating engineering, which is provided in the midships, second vessel protection area, are associated.
34. (Currently Amended) The frigate vessel-type equipment system as claimed in claim 31, including a third control network, which is essentially associated with a third vessel protection area and a bow-end vessel protection area and with which two fuel cell segments of the power generator segment which is arranged in the bow, a diesel reformer of the power generator ~~segment~~segment, which are arranged in the bow, a thruster segment of the propulsion segment and the vessel operating engineering which is provided in a third vessel protection area and in a bow-end vessel protection area are associated.
35. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 1, wherein the propulsion segment includes a 0.5 MW bow jet thruster.
36. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 2, wherein the propulsion segment includes a thruster segment.
37. (Previously Presented) The frigate vessel-type equipment system as claimed in claim 3, wherein electric motors in at least one of propulsion segments, waterjet propulsion segments and a thruster segment are designed with windings composed of high-temperature superconductors.

38. (New) A frigate vessel-type equipment system, comprising:
a vessel hull, matched to the frigate vessel-type equipment system on a size and requirement-specific basis; and
standard equipment segments including a power generator segment, a power distribution segment, a propulsion segment and an automation segment, at least one of the standard segments being formed from standard units and components arranged in accordance with the requirements in the vessel hull of the frigate vessel-type equipment system, and installable in vessel hulls of different vessel-type equipment systems, wherein the standard equipment segments are distributable across various portions of the vessel hull, and the power generator segment includes generators having windings composed of a high-temperature superconductor, and the power generator segment is distributed over a number of ship protection areas in the frigate vessel type equipment system.
39. (New) A frigate vessel-type equipment system, comprising:
a vessel hull, matched to the frigate vessel-type equipment system on a size and requirement-specific basis; and
standard equipment segments including a power generator segment, a power distribution segment, a propulsion segment and an automation segment, at least one of the standard segments being formed from standard units and components arranged in accordance with the requirements in the vessel hull of the frigate vessel-type equipment system, and installable in vessel hulls of different vessel-type equipment systems, wherein the standard equipment segments are distributable across various portions of the vessel hull, the power generator segment includes a first electrical system arranged in a stern end, first ship protection area, and a second electrical system, which is subdivided into a stern-end electrical system section with two gas turbines and a bow-end electrical system section with generators, is arranged in a midships, second vessel protection area.
40. (New) The frigate vessel-type equipment system as claimed in claim 39, wherein the stern-end electrical system section and the bow-end electrical system section of the

second electrical system are arranged in adjacent compartments in the midships, second vessel protection area .

41. (New) The frigate vessel-type equipment system as claimed in claim 39, wherein a third electrical system having two air-breathing PEM fuel cells is arranged in a third vessel protection area , which is arranged between a second, midships vessel protection area and a bow-end vessel protection area .
42. (New) The frigate vessel-type equipment system as claimed in claim 39, wherein a first diesel reformer center with a diesel reformer is arranged in a midships, second vessel protection area , in a compartment which accommodates a bow-end electrical system section of the second electrical system.
43. (New) The frigate vessel-type equipment system as claimed in claim 39, wherein a second diesel reformer center with a diesel reformer is arranged in a third vessel protection area , which is arranged between a midships, second vessel protection area and a bow-end vessel protection area .